

PRIMARY ALUMINUM FROM HEAVILY CONTAMINATED ALUMINUM SCRAP

Justification

As large amounts of heavily contaminated aluminum scrap (especially from discarded aluminum-intensive automobiles) hit the market place during 1986-1990, the existing secondary aluminum recovery methods would not be able to economically produce primary-grade aluminum. Therefore, a "technological need" is anticipated and the captioned process can fulfill that need. Technology and relevant professional skill exists at Tucson for electrolytic refining of scrap to produce primary-grade (or better) aluminum metal at about 2 kWh/lb aluminum.

Scope (1983)

The 1983 program would consist of:

- o Technological forecasting on supply and demand of secondary recycled aluminum market during 1986-1990.
- o Developing an Arco niche in the aluminum recycling business.
- o Developing technical and economic analyses on proposed ideas.
- o Recommending strategy for R & D.